

Amendments to the Claims:

The listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claim 1. **(Currently Amended)** A method of improving the security of computer communications over a connecting network which connects a plurality of user domains, at least one of which user domains comprises a network of a plurality of computers, and each of which user domains has a domain separator that is coupled in data communication with each computer which is connected to said network of computers, said method comprising the following steps that are carried out at a first such ~~before a data packet enters the connecting network from a user domain:~~

- a) said domain separator tagging the data packet from said first ~~[[a]]~~ user domain with a security level marking, tag; ~~[[and]]~~
- b) said domain separator appending the tagged data packet with a string formed from a check-sum made over the data packet and security level marking tag to form a datagram; and

c) thereafter sending the datagram to a second user domain via the connecting network.

Claim 2. (Currently Amended) A method as claimed in Claim 1, further comprising the following steps, which are carried out as the datagram attempts to enter the [[a]] second user domain:

c) verifying the string in the received datagram matches a string calculated over the received data packet and security level marking tag, and

d) verifying the received security level marking tag matches the security level of the second user domain.

Claim 3. (Previously Presented) A method as claimed in Claim 1, comprising the further step of encrypting each datagram before entry into the wide area network.

Claim 4. (Previously Presented) A method as claimed in Claim 1, wherein datagrams from more than one user domain are encrypted by the same cryptograph.

Claim 5. (Previously Presented) A method as claimed in Claim 4, wherein the check-sum is a one-way hash function.

Claim 6. (Original) A method as claimed in Claim 5, wherein the one-way hash function is SHA-1.

Claim 7. (Previously Presented) A method as claimed in Claim 6, further comprising the step of recording any mismatch of check-sum or security level marking tag.

Claim 8. (Previously Presented) A domain separator for improving the security of computer communications over a connecting network arranged to carry out the method according to Claim 7.

Claim 9. (Original) A domain separator as claimed in Claim 8, wherein the user domain security level marking is set by a physical switch on the device.

Claim 10. (Previously Presented) A method as claimed in Claim 1, wherein the check-sum is a one-way hash function.

Claim 11. (Previously Presented) A method as claimed in Claim 10, wherein the one-way hash function is SHA-1.

Claim 12. (Previously Presented) A method as claimed in Claim 11, further comprising the step of recording any mismatch of check-sum or security level marking tag.

Claim 13. (Previously Presented) A domain separator for improving the security of computer communications over a connecting network arranged to carry out the method according to Claim 12.

Claim 14. (Previously Presented) A domain separator as claimed in Claim 13, wherein the user domain security level marking is set by a physical switch on the device.

Claim 15. (Previously Presented) A method as claimed in Claim 2, further comprising the step of recording any mismatch of check-sum or security level marking tag.

Claim 16. (Previously Presented) A domain separator for improving the security of computer communications over a connecting network arranged to carry out the method according to Claim 15.

Claim 17. (Previously Presented) A domain separator as claimed in Claim 16, wherein the user domain security level marking is set by a physical switch on the device.